

# Appendix

## Marked-up version of Amended Claims

1. A T helper cell epitope selected from the group consisting of SEQ ID NOS: 6-22, 105, 123, 124, and 31-35.
2. A T helper cell epitope according to Claim 1 for preparing a peptide immunogen represented by the formula

$$(A)_n-(\text{Target antigenic site})-(B)_o-(\text{Th})_m-X$$

or

$$(A)_n-(\text{Th})_m-(B)_o-(\text{Target antigenic site})-X$$

or

$$(A)_n-[-](B)_o(\text{Th})_m-(B)_o-(\text{Target antigenic site})-X$$

or

$$(\text{Target antigenic site})-(B)_o-(\text{Th})_m-(A)_n-X$$

or

$$(\text{Th})_m-(B)_o-(\text{Target antigenic site})-(A)_n-X$$

wherein:

A is an amino acid or a general immunostimulatory sequence, where n is more than one, the individual A's may be the same or different,

B is selected from the group consisting of amino acids,  $-HCH(X)CH_2SCH_2CO-$ ,  $-NHCH(X)CH_2SCH_2CO(\epsilon-N)Lys-$ ,  $-NHCH(X)CH_2S-succinimidyl(\epsilon-N)Lys-$ , and  $NHCH(X)CH_2S-(succinimidyl)-$ :

Th is an artificial helper T cell epitope selected from the group consisting of SEQ ID NOS: 6 22, 105, 31-35 [or] and an analog thereof;

"Target antigenic site" is selected from the group consisting of a B cell epitope, a peptide hapten, and a immunologically reactive analog thereof;

X is amino acid  $\alpha-COOH$  or  $CONH_2$ ,

n is from 1 to about 10;

m is from 1 to about 4; and

o is from 0 to about 10.

A

9. A peptide immunogen according to Claim 7 selected from the group consisting of SEQ ID NOS: 104, and 105.
11. A peptide immunogen according to Claim 10 selected from the group consisting of SEQ ID NOS: 110 - 118, and 119.
13. A peptide immunogen according to Claim 12 selected from the group consisting of SEQ ID NOS: 126 - 129, and 136 - 151.
14. A peptide immunogen according to Claim 13 selected from the group consisting of SEQ ID NOS: 148 - 150, and 151.

A